

Table 6  
Sample Locations and Analyses

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Sample Location	Matrix	A4 Scientific CLP TAL Metals ICP/AES	A4 Scientific CLP TAL Total Metals/Bg ICP-MS and ICP/AES	A4 Scientific CLP TCL Semivolatiles and Pesticides/PCBs	Datachem Laboratories CLP TCL Trace Volatiles	EPA Region 8 Lab SVOA/MS-TOF / GRO/DRO	EPA Region 8 Lab VOCs	EPA Region 8 Lab VOC Light Gases	EPA Region 8 Alkalinity and Anions	Energy Labs Bacteria HPC/IRB/SRB	Energy Labs GRO/DRO	Zynax Geochemistry Forensics Testing
PGDW03	Water		X	X	X	X	X	X	X	X	X	
PGDW04	Water		X	X	X	X	X	X	X	X	X	X
PGDW05	Water		X	X	X	X	X	X	X	X	X	
PGDW05D	Water		X	X	X	X	X	X	X		X	X
PGDW10	Water		X	X	X	X	X	X	X	X	X	
PGDW20	Water		X	X	X	X	X	X	X	X	X	X
PGDW22	Water		X	X	X	X	X	X	X	X	X	
PGDW23	Water		X	X	X	X	X	X	X	X	X	X
PGDW25	Water		X	X	X	X	X	X	X	X	X	
PGDW30	Water		X	X	X	X	X	X	X	X	X	X
PGDW32	Water		X	X	X	X	X	X	X	X	X	
PGDW39	Water		X	X	X	X	X	X	X	X	X	
PGDW40	Water		X	X	X	X	X	X	X	X	X	X
PGDW41	Water		X	X	X	X	X	X	X	X	X	X
PGDW42	Water		X	X	X	X	X	X	X	X	X	
PGDW43	Water		X	X	X	X	X	X	X	X	X	X
PGDW44	Water		X	X	X	X	X	X	X	X	X	X
PGDW45	Water		X	X	X	X	X	X	X	X	X	
PGDW46	Water		X	X	X	X	X	X	X	X	X	
PGDW47	Water		X	X	X	X	X	X	X	X	X	
PGDW48	Water		X	X	X	X	X	X	X	X	X	
PGDW49	Water		X	X	X	X	X	X	X	X	X	
PGFB01	Water			X								X
PGMW01	Water		X	X	X	X	X	X	X	X	X	
PGMW01D	Water		X	X	X	X	X	X	X	X	X	
PGMW02	Water		X	X	X	X	X	X	X	X	X	
PGMW03	Water		X	X	X	X	X	X	X	X	X	
PGPP01	Product					X	X					X
PGPP02	Product											X
PGPP03	Product											X
PGPP04	Product					X	X					X
PGPP05	Product					X	X					X
PGPP06	Product					X	X					X
PGPW01	Municipal Water		X	X	X	X	X	X	X	X	X	
PGPW02	Municipal Water		X	X	X	X	X	X	X	X	X	
PGSE01	Sediment	X		X	X							
PGSE02	Sediment	X		X	X							
PGSE02d	Sediment	X		X	X							
PGSE03	Sediment	X		X	X							
PGSE04	Sediment	X		X	X							
PGSE05	Sediment	X		X	X							
PGSO01	Soil Boring					X						
PGSO02	Soil Boring						X					
PGSO03	Soil Boring							X				
PGSW01	Surface Water		X	X	X	X	X	X	X	X	X	
PGSW02	Surface Water		X	X	X	X	X	X	X	X	X	
PGSW02D	Surface Water		X	X	X	X	X	X	X	X	X	
PGSW03	Surface Water		X	X	X	X	X	X	X	X	X	
PGSW04	Surface Water		X	X	X	X	X	X	X	X	X	
PGSW05	Surface Water		X	X	X	X	X	X	X	X	X	
PGTB01	Water					X	X					
PGFM20	Filter Sample						X	X				



Table 10  
 VOA and TPH/GRO Results

Analyte	Laboratory Name	SCDM (Drinking Water)			PGDW																			
		MCL ( $\mu\text{g/L}$ )	RDN/C ( $\mu\text{g/L}$ )	CRSC ( $\mu\text{g/L}$ )	PGDW03	PGDW04	PGDW05	PGDW06D	PGDW10	PGDW20	PGDW22	PGDW25	PGDW30	PGDW32	PGDW39	PGDW40	PGDW41	PGDW42	PGDW43	PGDW44	PGDW45	PGDW46	PGDW47	PGDW48
<b>Volatile Organic Analysis</b>																								
1,1,2-Tetrahydro-1,2,2-trifluoroethane	CLP																							0.38 J <sup>1</sup>
1,2,4-Trimethylbenzene	U.S. EPA RR																							
1,3,5-Trimethylbenzene	U.S. EPA RR																							
1,3-Dimethyl isobutylamine	U.S. EPA RR																							
2-Hexanone (M+N)	CLP	22,000																						
Acetone	CLP	33,000																						
Adamanthane	U.S. EPA RR																							
Benzene	CLP	5	150	1.5																				
Benzene	U.S. EPA RR	5	150	1.5																				
Carbon disulfide	CLP		3,700																					
Carbon disulfide	U.S. EPA RR		3,700																					
Chloroform	CLP		360																					
Chloroform	U.S. EPA RR		360																					
Chloromethane	CLP																							0.24 J <sup>1</sup>
Chloromethane	U.S. EPA RR																							0.27 J
Cyclohexane	CLP																							
Ethane	U.S. EPA RR																							
Ethylbenzene	CLP	700	3,700																					
Ethylbenzene	U.S. EPA RR	700	3,700																					
Isopropylbenzene	CLP		3,700																					
Isopropylbenzene	U.S. EPA RR		3,700																					
m,p-Xylene	CLP	10,000	73,000																					
m,p-Xylene	U.S. EPA RR	10,000	73,000																					
Methane	U.S. EPA RR																							
Methylcyclohexane	CLP																							
Methylene chloride	CLP	5	2,200	11																				
Methylene chloride	U.S. EPA RR	5	2,200	11																				
n-Butyl Benzene	U.S. EPA RR																							
n-Propyl Benzene	U.S. EPA RR																							
n-Xylene	CLP	10,000	73,000																					
n-Xylene	U.S. EPA RR	10,000	73,000																					
p-Isopropylbenzene	U.S. EPA RR																							
Proprane	U.S. EPA RR																							
sec-Butylbenzene	U.S. EPA RR																							
Styrene	CLP	100	7,300																					
Styrene	U.S. EPA RR	100	7,300																					
tert-Butylbenzene	U.S. EPA RR																							
Toluene	CLP	1,000	7,300																					
Toluene	U.S. EPA RR	1,000	7,300																					
<b>TPH, GRO</b>																								
TPH in Gasoline (GRO)	Energy																							
TPH in Gasoline (GRO)	U.S. EPA RR																							
TPH Total Purgeable Hydrocarbons	Energy																							

1 = Exceeded holding time.

2 = Compound found in method blank; detection is above 10x method blank value.

3 = Low recovery of surrogate; potentially biased low.

4 = High recovery of surrogate; potentially biased high.

5 = Exceeded upper linear calibration range; biased low.

6 = High recoveries for the compound in the corresponding spike sample.

7 = Variability of samples outside QC limits for matrix spike.

8 = Recoveries below control limits for initial calibration verification or continuing calibration verification; potentially biased low.

9 = Recoveries above control limits for initial calibration verification or continuing calibration verification; potentially biased high.

10 = Low recovery for the compound in the corresponding spike sample.

The sample was not analyzed for this analyte.

(Blank Cell) Non Detect for this analyte.

J = Estimated as below Contract Required Quantitation Limit but above Method Detection Limit.

**Table 11**  
**Wet Chemistry and Bacteriological Results**

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Analyte	Laboratory Name	PGDW03	PGDW04	PGDW05	PGDW05D	PGDW10	PGDW20	PGDW22	PGDW23	PGDW25	PGDW30	PGDW32	PGDW39	PGDW40	
<b>Bacteriological</b>															
Bacteria, Heterotrophic (MPN/ml)	Energy	2		45		6		230	510					2	50
Bacteria, Iron Related	Energy	Present	Absent	Present		Present	Absent	Present	Present	Absent	Absent	Absent	Absent	Present	
Bacteria, Approximate Iron Related Bacteria Population (CFU/ml)	Energy	500	Not Aggressive	9,000		9,000	Not Aggressive	9,000	2,300	Not aggressive	Not aggressive	Not aggressive	Not aggressive	9,000	
Bacteria, Sulfate Reducing	Energy	Absent	Absent	Present		Absent	Absent	Absent	Absent	Absent	Present	Absent	Present	Present	
Bacteria, Approximate Sulfate Reducing Bacteria Population (CFU/ml)	Energy	0	0	10 - 100		0	cc	0	0	c	10 - 100	0	10 - 100	10 - 100	
<b>Wet Chemistry (mg/L)</b>															
Alkalinity (ppm)	U.S. EPA RS	28	38.3	88.4	89.1	147	67.9	337	54.2	295	94	31.5	129	86.3	
Sulfate as SO <sub>4</sub> (ppm)	U.S. EPA RS	570	532	287	287	293	1270	2780	368	441	333	368	3640	426	
Fluoride (ppm)	U.S. EPA RS	0.8	0.9	0.9	1	0.9	0.8		1.5		0.9	2.4	0.3		
Chloride (ppm)	U.S. EPA RS	20.7	23.3	16.5	16.9	7.5	32.6	74.6	19.7	9.5	15.5	21.4	52.9	13.1	
Nitrate as N (ppm)	U.S. EPA RS	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	40.7	<0.3	1.7	<0.3	<0.3	<0.3	<0.3	
Nitrite as N (ppm)	U.S. EPA RS	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	

1 - Exceeded holding time.

2 - Compound found in method blank; detection is above 10x method blank value.

3 - Low recovery of surrogate; potentially biased low.

4 - High recovery of surrogate; potentially biased high.

5 - Exceeded upper linear calibration range; biased low.

6 - High recoveries for the compound in the corresponding spike sample.

7 - Variability of samples outside QC limits for matrix spike.

8 - Recoveries below control limits for initial calibration verification or continuing calibration verification; potentially biased low.

9 - Recoveries above control limits for initial calibration verification or continuing calibration verification; potentially biased high.

10 - Low recovery for the compound in the corresponding spike sample.

 The sample was not analyzed for this analyte.  
 (Blank Cell) Non Detect for this analyte.

Table 12  
 Metals Data

Analyte	CLP Limits - Water (µg/L)				SCDM (Drinking Water)																
	MCLG (µg/L)	MCL (µg/L)	RDSC (µg/L)	CRSC (µg/L)	PGDW03 µg/L	PGDW04 µg/L	PGDW05 µg/L	PGDW05D µg/L	PGDW10 µg/L	PGDW20 µg/L	PGDW22 µg/L	PGDW23 µg/L	PGDW25 µg/L	PGDW30 µg/L	PGDW32 µg/L	PGDW39 µg/L	PGDW40 µg/L	PGDW41 µg/L	PGDW42 µg/L	PGDW43 µg/L	
ALUMINUM	200	0	0		200 U	200 U	200 U	200 U	200 U	200 U	200 U	200 U	200 U	200 U	200 U	200 U	200 U	241	200 U	200 U	
ANTIMONY	2	6	6	15		2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2.1 U
ARSENIC	1	0	10	11	0.057	0.42 J	0.32 J	0.36 J	1 U	1 U	0.5 J	0.47 J	1 U	0.46 J	1 U	0.53 J	0.32 J	1 U	0.89 J	1 U	1.3
BARIUM	10	2,000	2,000	2,600		6.7 J	6 J	11 J	10.3	9.1 J	9.3 J	6.3 J	8.9 J	14	6.8 J	9.6 J	6.9 J	11.7	9.6 J	7.9 J	5.4 J
BERYLLIUM	1	4	4	73		1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.29 J
CADMIUM	1	5	5	18		1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.36 J
CALCIUM	5000					16300	15500	3330 J	3150 J	3760	71700	397000	5820	70100	4050 J	6890	389000	6570 J	270000 J	5060	208000 J
CHROMIUM	2	100	100	110		2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	0.45 J
COBALT	1					1 U	1 U	1 U	1 U	1 U	1 U	0.33 J	1 U	1 U	1 U	1 U	0.42 J	1 U	0.51 J	1 U	0.57 J
COPPER	2	1,300	1,300			4.4 J	3.9 J	7.7 U	4.7 J	2.7 J	8.8 J	16.3 J	4.3 J	4.3 J	3.9 J	3 J	16.7 J	3.1 U	201 J	5.5 J	19.4 J
IRON	100					100 U	100 U	66.6 J	64.7 J	100 U	300	100 U	100 U	44.1 J	125	330	1260	1880	96.6 J	403	
LEAD	1	0	15			1 U	1 U	0.42 J	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.91 J	38.3	1 U	0.81 J
MAGNESIUM	5000					5000 U	5000 U	5000 U	5000 U	5000 U	8140	130000	5000 U	9630	5000 U	5000 U	147000	5000 U	57500	5000 U	13700
MANGANESE	1			5,190		1.7	2.8	2.2	1.8	3.8	31.3	3	2.8	20.9	2.2	3.2	174	32.8	222	3	84.4
MERCURY	0.2	2	2	11		0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
NICKEL	1			730		0.38 J	0.26 J	0.48 J	0.21 J	0.4 J	0.46 J	1.9	0.23 J	1 J	0.83 J	0.61 J	1.3	0.49 J	3.6	0.42 J	2.4
POTASSIUM	5000					5000 U	5000 U	5000 U	5000 U	5000 U	5830	5000 U	5000 U	5000 U	5000 U	5280	5000 U	2680 J	5000 U	5000 U	
SELENIUM	5	50	50	180		5 U	5 U	5 U	5 U	5 U	0.98 J	3.9 J	5 U	1.3 J	5 U	5 U	1.2 J	5 U	1.4 J	5 U	3.9 J
SILVER	1			180		1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.3 J
SODIUM	5000					251000	265000	189000	181000	195000	550000	908000	194000	269000	195000	193000	1110000	244000	1030000	181000	911000
THALLIUM	1	0.5	2			1 U	1 U	0.23 J	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.76 J
VANADIUM	5			260		5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	2.7 J	5 U	1 J	
ZINC	2			11,000		2.5	1.1 J	1.4 J	2 U	2	7.6	2.7	2 U	15.1	1.2 J	23.9	26.8	211	32.5	12 J	17.5

MCLG Maximum Contaminant Level Goal. A non-enforceable health goal that is set at a level at which no known or anticipated adverse effect on the health of persons occurs and which allows an adequate margin of safety.

MCL Maximum contaminant Level. The highest level of a contaminant that is allowed in drinking water. MCLs are set as close to the MCLG as feasible using the best available analytical and treatment technologies and taking cost into consideration. MCLs are enforceable standards.

SCDM Superfund Chemical Data Matrix

RDSC Reference Dose Screening Concentration

CRSC Cancer Risk Screening Concentration

CRDL Contract Required Detection Limit

J Estimated as below Contract Required Quantitation Limit but above Method Detection Limit.

U Non-Detect

**Table 13**  
**Fixed and Light Gases in Natural Gas from**  
**Production Wells and Domestic Water Wells**

Analyte	Laboratory Name	PGDW03	PGDW04	PGDW05	PGDW05D	PGDW10	PGDW20	PGDW22	PGDW23	PGDW25	PGDW30
Methane	ZymaX		5.2		53		1300		820		6300
Ethane	ZymaX						52		1.7		1.8
Propanes	ZymaX						5.8				
Butanes	ZymaX				7.3		6.9		12		3.1
Pentanes	ZymaX				11		1.3		2.3		3.9
Hexanes	ZymaX				4.7				2.4		0.77
Heptanes	ZymaX				2.5				0.5		0.79
Octanes	ZymaX				4.1		1.9		2.4		2.9
Nonanes	ZymaX										
Decanes	ZymaX										
Total	ZymaX		5.2		82		1368		841		6313

The concentrations represent ppm of the gas hydrocarbons in the headspace created above the water in the 1 litre bottle.

These are not concentrations in the water of the analyte.



The sample was not analyzed for this analyte.

(Blank Cell) Non Detect for this analyte.

Table 17  
3-C10 Gasoline Range Compounds from Production Wells and Domestic Wells  
( $\mu\text{g/L}$ )

No. 0901-01  
PARTY WITHIN AREA CW INVESTIGATION UNIT AREA CW Plane 2 SHARON AND ALICEA Tables A

Table 17  
C<sub>3</sub>-C<sub>10</sub> Gasoline Range Compounds from Production Wells and Domestic Wells (μg/L)

The sample was not analyzed for this analyte.  
(Blank Cell) Not Detected for this analyte.